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A PROGRAM OF OUTDOOR RECREATION FOR

STATE FORESTS OF CALIFORNIA

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Ву

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It is good of you members of the State Forestry Board to ask me to speak to you concerning the recreational use of land. In the first place, I feel strongly on the subject of land—a term which I feel is all-inclusive, and must include air and water as well. It is evident to me that all our physical and material things are products of this land. I fail to note anything, atomic reactors, apples, electricity, shoes, electronic data processing machines or doughnuts, which are not elements of the land, rearranged and reorganized, to be sure, but always reacting to each other and to natural processes to produce that which we know and use.

I see but one source of wisdom and ability to determine how and when to produce such rearrangements to the public good—the minds of our young people now and to come. I know of but one process to produce the interplay of mind and matter—education. When we actually realize and become truly aware of how interdependent man and the rest of nature really are and how dependent we are upon each other, we may then get a "recreation and land use program" off the ground. We need many more people in all natural resource agencies who have a point of view based on the interrelationship of resources rather than on their individual desires for the use or exploitation of such resources.

Man himself has many needs in addition to physical and economic needs. Man needs such things as shelter. Man needs houses, and not only houses in which to live, which are substitutes for the old caves which man occupied, but he now has to have houses in which to work as well. Man must also be clothed in something other than saber-tooth tiger hide. In any case, all the demands which man has for his physical makeup are demands which result in the use of land. There are demands on land due to physical needs, due to scientific needs, due to aesthetic needs. But in any case, man himself cannot manage without the land. Since everything comes from the land, man has an abiding love of the land, and this brings me to the recreational use of land. Man's recreational needs are as varied as his physical needs are varied. In fact, it is quite difficult for me, and I believe for anyone else, to give a firm definition of a "recreational need". Section 4426 of the California Public Resources Code, which establishes certain purposes for state forests, recites, for instances, the services which should be included in these forests as "hunting, fishing, camping and" (of all things) "recreation". Whether some lawmaker meant that fishing, camping and hunting are not fun or are not forms of recreation, I am sure I do not know. However, to imply that recreation is not obtained in hunting, fishing, or camping is equally incorrect. To me these things all seed to be recreation.

I believe in man's love of the land. It may be a misunderstood love, but nevertheless, this deep feeling for the land is a part of man's background. I believe that another of man's needs is brought about by his innate love of beauty. This may be equally misunderstood. However, when man stands and watches the sunset, when he turns to look at a single wild flower in a sunny woodland, whether he watches the waves of the ocean wash against the rocky land of the Big Sur Coast, or whether he watches a trout in a sunspotted pool in the Sierra, man is enjoying his love of beauty. This enjoyment is recreation. To be able to look, to understand what one sees, and by understanding it, to enjoy it, is a real fulfillment of a need.

Man has a close affinity with forests. There must be a reason why he wants to be out in the woods, why he likes to camp in the woods, why he wants to be with the trees, with his feet on the ground and the blue sky over his head. Camping as camping is much easier done in one's own backyard. The restroom is close and clean. The shower is just around the corner. The refrigerator is there fully stocked with food. If the desire to camp is a superficial desire satisfied by being under canvas with stars overhead, undoubtedly the proper place to satisfy this desire is at home. I believe, however, that the need is far beyond the physical act of camping, I feel that the real reason behind man's need for this kind of outdoor recreation is the fact that man in this world has a history of living in the forest. Man has lived in the forest in association with the out-of-doors and has done this for at least two million years. This he could not have done without learning, developing and keeping within himself a love of the forest environment. To me, this is why people want to use forests for camping. Man's association has also been with water. Man emerged from water. Water is something closely associated with people in many ways. It is much more to most people than an item of drink or something in which to wash one's hands. Water itself is a part of man's inmost being, a part of his physical makeup, and has been with him as a part of his environment for as many millions of years as man has been on this planet. Consequently, man loves the rivers, loves the ocean, the lakes, and he has gotten his living from the land or from the water for the same number of years. You know and I know that fish come cheaper, cleaner and more conveniently from the butcher shop or fish market than they do from the trout streams of the high Sierras, from the salmon-fishing streams of the coast, or from the ocean itself off our shoreline. No fish market I know gives man the satisfaction of exercising this age-old skill as a fisherman. This again is true recreation.

I believe that we have these affinities for the out-of-doors and that they are born in us. The desires are here with us and our problem is how to weigh these desires with our modern life and our modern methods of living and produce a satisfactory and rewarding "way of life". We still pursue climbing and hiking and we need a place to do these things. People also need to experience solitude, to be away from other people. It is important in the recreational scheme for people to wonder, to look with awe at something. It is up to us now to determine how we may arrange the land and manage its use to provide some kind of environment in which we can live and in which we feel secure and happy, an environment we may enjoy and in which we may bring up our family. Our other problem is, what do we leave to sustain the next fellow? What do we leave for him to use and on which to produce his living and his culture? This is as much our problem as it is his problem because the solution of his problem depends on us. Consequently, we must learn how to manage our land, how to protect our land, and how to see that it is here for all time to come.

In the field of forestry there is an immense amount of knowledge. A trained forester knows how to bring a forest back after it has been destroyed, how to control what crops he wants to grow, how to avoid damage by fire, how to protect from fire, and how to help the land recover after fire. We also know a great deal about erosion. However, we do not know as much about erosion as we might. We have done everything we know how to do to stop erosion. As soon as this erosion problem of ours is controlled, as soon as all erosion is stopped, suddenly we find there is no more sand on the beaches. Ocean beaches continually need additional sand in order to keep themselves built up as the littoral drift moves the sand southward along the California coast. Here we find the ideal solution to one problem, the problem of erosion, causing an

additional problem in a far different field. The one source of sand is erosion of the continent itself, such eroded sand running out into the continental shelf waters and being distributed by the littoral drift along the coast line of our continent. Without this continuous action, our sand beaches will disappear. How valuable a sand beach is in comparison with an erosionless land is a matter we must determine before we know which processes to pursue to preserve and protect the land we have.

I mention this only because to me it is important to remember that no solution is a perfect solution and that all our land, our water, our air, in fact, our total bank of natural resources is in fact completely interdependent, and that for anything we correct, destroy, dispose of, or remove, there are effects in other fields of natural resources which we must know and understand before we make our first move.

In the field of forestry there is a great opportunity to serve many of the needs of man. Whether these forests are private, state-owned, or federally owned, many such needs can be met in the forested land of the State of California and of the United States. There may be incompatible uses and there may be inconvenient uses that occur on one area of land. However, it seems that hunting and fishing can well be pursued on forest land. That the needs for hiking, for trails, the ability to satisfy man's love of scenery, to enjoy the beauty of trees, to enjoy the beauty of a woodland landscape with its varying animals, its birds, its lizards, its ferns, and its wild flowers, can well be done in any forest area through good management .- management of the proper time for harvesting, management through the use of small dams to provide fishing waters, provide quiet waters for camping, management to see that game is plentiful and that game food is available, and management to be sure that habitat is satisfactory to the species of game which should be located within the area in question. All these things can be done on forest land and all of them will cost money.

Are these recreational developments to be of a planned nature? This is a choice that we must make. Camps may be provided for the normal growing life of a particular kind of timber. A camp ground can be built that will serve for a hundred years and then after proper harvesting of the timber, a new campground may be built in another area with another hundred years to serve the public. Whether or not this cost is recoverable on a public or private basis needs much more research than we have been able to give it. I do not know the dollar benefit to the public which may be allowed for the use of recreation on any given hundred acres of land. Various reports say that a day outdoors is worth fifty cents per visitor, seventy cents, or up to \$2.00. There are many major benefits in other fields. The amount of money put into camping gear is considerable but it does not come back into the public treasury for the operation of recreation areas or for the operation of state forest areas. Many of these benefits are of great general good. They are beneficial to the public but they come back to the public in ways that are not shown as an identifiable dollar in the State Treasury. We have not done adequate research in this field, In fact, we have done very little research in this field at all.

One of the major benefits in the installation of recreational units on private and public forest lands is the fact that these then make show windows for good forestry practices. If these are good practices and if these forest areas are places where you want to bring the public up to date on what has been done, up to date on what can be done, and up to date on the forest methods in use today, these forest recreation areas are the places in which to do this job. In these areas you may explain to the public, you may show them with charts, with pictures, with legends, with texts, what it is you are now doing and what you expect to do. This can be a real interpretive production and should have the benefit of a real and professional interpretive touch in

designing the display itself. Here you may tell the visitor what a snag is and why it should be removed or why it should not be. Here you may explain the values of reforestation by the use of seedling trees, by the use of artificial seeding or by the natural seeding process. Here you might ask them to look around and see the condition of the forest and to note the new growth. You can explain rodent control. In fact, you can explain everything about the management of an outdoor forest area. In my opinion, people are entitled to know about this management program. The public is entitled to know how you foresters manage land and why you manage it. I have a feeling that neither in forests nor in parks have we done the best job of explaining to the public what our program is.

As you all know, there is great competition for land. We use land for everything. We live on it. We eat off it. We grow everything on it. We use it for highways. We use it for traffic and we also use it for recreation. We cannot use all land for all purposes. We have made a study of this problem. In fact, this problem has been studied for years. We have not begun to study, however, on an integrated basis exactly how to solve the problem. Too frequently we are studying our outdoor resource problem as a forester, as a park man, as a fish and game man, but we are not always studying the out-of-door problem as an integrated one involving all of us. We should study these proglems together. We should concentrate on these problems. In fact, we must concentrate on moderation in any solution at which we arrive. We must be able to integrate our relationships each with the other, with each different agency of management, and to produce for ourselves an understanding of each other's problems. We must solve all these vexing problems as a team and not as individuals. We will need to learn to talk to each other, which we have not yet done. We do not even have a common vocabulatry. We need to study each other's programs. You, in forestry, must study the problems arising in public parks. We, in parks, must study the problems arising in forests, in the management of private as well as public forest land, and in your immense problem of preserving all of California's lands from the ravages of fire. We need a joint vocabulary. When I say multiple use of a forest and you say multiple use of a forest, neither of us knows what the other means. Many people think that we mean multiple use of each acre of land or each square foot of land. However, I am sure we in the park field do not mean this. I am equally sure you in the forest service know what you mean.

I am not sure that there is a complete awareness of the fact that the highest "development", and I use the word advisedly, of a park area which has been acquired to preserve the magnificent coastal redwoods, is the actual acquisition of the land in order to preserve and maintain the redwoods themselves for the enjoyment of future generations. To build buildings, to build campgrounds, to lay water lines and put in septic tanks and disposal fields throughout an area of excellent virgin redwood is not "development" --/ it is almost utter destruction. So when I say "development". I mean something and I am not sure you know what it is. When you say "preservation", you mean something, and I am not sure that I know what it is. I am not sure any of us knows what the words "in lieu taxes" mean. In lieu of what? Or is it taxes? Or is it reimbursement? Or does the land as developed for recreation produce more undefinable tax revenue for the county than it ever did formerly? At least this is another field that needs complete study. I would like to end my discussion with you by reminding you of the Indian sage who said, "It is impossible to understand your brother until you walk for many moons in his moccasins". If we walk in yours and you walk in ours, we will eventually understand our joint problems of the protection, the use, the conservation, and the enjoyment of California's magnificent outdoor heritage.

by W. C. Branch, Assistant Regional Forester, U. S. Forest Service

OUTDOOR RECREATION - IN CALIFORNIA'S NATIONAL FORESTS

California has approximately 20 million acres of National Forest land. This is one fifth of the total land area of the State. Of the 20 million acres, $8\frac{1}{2}$ million are commercial forest and $11\frac{1}{2}$ million are non-commercial varying from woodland, brush and grass lands at the lower elevations to alpine meadows, lakes and non-commercial forests in the high country. All of it is of prime watershed importance to California; the commercial forest lands are of great importance to the timber economy of the state and nation, and both the commercial and non-commercial portions of it contain many recreation opportunities for people.

Forest recreation was an incidental use in the early days of National Forest management. There were no established campgrounds or picnic sites, no formally developed inland beaches, no ski lifts, no summer home tracts, no organization camps, and no marinas. The public forest lands were there for such casual recreation use as hunting, fishing or hiking as happened to come along and these activities rarely interferred in any way with any other resource management activities.

Then the problems of sanitation needs and to a greater extent the requirements of effective fire prevention made it desirable to concentrate the major recreation uses into designated sites. These became our early day campgrounds and picnic sites. Special forms of recreation occupancy were also approved under permits. Development programs of the Civilian Conservation Corps greatly added to the recreation improvements. This made possible the first substantial expansion in development of forest campgrounds and picnic areas and expended road and trail construction which made additional recreation areas accessible.

During World War II and for some time thereafter, National Forest recreation development and management saw some "lean years" which were followed by intensive activity in the highly successful 5-year Operation Outdoors Program from 1957 through 1961. Then in 1960 Congress passed the Multiple-Use Act which for the first time officially recognized that recreation management was a bona fide National Forest activity. Along with timber, wildlife, range, and water, it now forms a prominent part of the 10-year Development program for the National Forests. In the National Forests of California it currently caters to more than twenty-three and one-half million man-days of recreation use annually.

This recreation use takes many forms of which camping and picnicking are only, part. We maintain more than 15,000 campground and picnic family units to accommodate these activities, but in addition provide for a considerable number of recreation uses which really stand on their own feet. Resorts, marinas, winter sports areas, trailer camps, service stations, and pack stations, are examples of these. Private capital under permit provides and operates the improvements required; the user pays his way and the operator pays the Forest Service an equitable fee for the commercial use of public land. It is a self-supporting type of wildland recreation which currently involves 390 National Forest permits in Region 5.

We find another segment of self supporting recreation use in organization camps and summer homes. Ordinarily the Forest Service furnishes no facilities but collects an equitable rent for the exclusive use of public land. A total of 9,030 permits for these types of uses are presently being maintained in California's National Forests.

We are also operating more than 1100 camp and picnic areas and need to add to them. It is in this activity that the Forest Service requires substantial Federal appropriations. Here we are now working with various procedures for making a moderate charge for the use of improved facilities. To keep overhead at a minimum, we have adopted two self-service systems (coin-operated gate and ticket-dispensing machine) which cut daily fee collection costs down to as little as eight cents per family unit. The charge is generally \$1.00 per day for camping and fifty cents per day for picnicking. The fees collected go to the Treasury and 25% is returned to the counties concerned to be used for roads and schools.

For the time being at least, we have not considered it feasible to charge for dispersed types of National Forest recreation use. Because there is so much private land intermingled with that belonging to the public, it has not seemed equitable or practical to require the recreationist to pay a separate National Forest fee for hunting, fishing, hiking, wilderness camping, or similar pursuits which do not require installed facilities. About one-third of our recreation use in the California National Forests is of this type, and since few improvements are required the Federal Government is currently absorbing the administrative costs involved. As you know, Congress is currently considering several bills aimed at authorizing some sort of charge for recreation use on most categories of federal lands. Examples are the Administration's Land and Water Conservation Fund proposal, and the Senator Dominick measure proposed as a substitute.

As previously mentioned, about one-fifth of the State of California is in the National Forest system and there is very little of this land which does not to some extent serve outdoor recreation in one or more of the many categories mentioned. The demand trend is very definitely upward and as the need for additional outdoor recreation in California continues to grow, the importance of National Forest lands for recreation purposes seems destined to increase.

Francis Raymond indicated that the Board would be interested in hearing of a few basic problems encountered in our recreation activities. Due mainly to the early day lack of specific guidelines plus understandable mistakes in judgment in times prior to good accessibility, a few areas such as lakeshore and streamside, now needed for general public use, were assigned to summer homes under permit. In our program aimed at recapturing such areas as they come to be needed for braod public use, we occasionally encounter controversy which makes the news. Another problem is with requests for development of special type uses such as a ski area within long established wilderness areas.

Within the past ten years, Region 5 has developed a broad system of guides to land management which help greatly in current and future assignments of uses by areas. Briefly the Region is divided into five subregions. For each subregion there is a Management Direction Plan which provides broad management guidelines to each National Forest in the subregion. Using this as a guide each National Forest has developed a "Multiple-Use Management Plan" for each ranger district on the forest. Each district is zoned in accord with the primary use of specific

portions of the district such as roadside, waterfront, timber, crest or special zone such as Wilderness. Management priorities, objectives and direction for each zone are set forth in the plan. Every ranger district in Region 5 now has a Multiple Use Management Plan. I have a sample of each of these with me in case someone wishes to look them over.

Francis also invited suggestions as to possible development of recreation use on the State Forests. Certainly California's State Forests have areas suited to public recreation. Predictions of outdoor recreation needs for 1975 and 2000 indicate the need for stepped-up development on both public and private forest lands. Regional and national associations of private forest landowners have expressed a policy of multiple use of private forest lands, including of course, recreation use.

In view of this, it seems to me appropriate that California's State Forests be developed for their recreation potential and that the development be planned so as to demonstrate to private forest landowners such things as suitability of various type areas for specific types of recreation use, costs per unit for development and what can be expected in the way of returns on investment. Since the Division has Conservation Camps available to do recreation development work, it seems you would be in a very favorable position to embark on a recreation program in State Forests.

by Philip T. Farnsworth, Executive Vice President California Redwood Association

I was very happy to get Francis Raymond's letter announcing this meeting and telling of the interest of the Board of Forestry in how the facilities offered by the State Forests might be put to use in solving or helping to solve some of the recreational questions that face the State now and in the future. I am also glad to have the discussion today center largely on Jackson State Forest principally because, with its large acreage, experimentation here gives promise of furnishing far more definitive answers than would experimentation in smaller management units.

Starting as you are now, with the task of developing some firm policies relating to the use and management of State Forests for recreation, you can set the stage for achieving results of a magnitude commensurate with the size of the forest itself.

I hope that the policies you gentlemen set for research on these lands will include a high degree of cooperation with other State agencies having an interest in recreation and land use. The obvious ones are Parks and Recreation and Fish and Game. There may be others.

We have only to look at the confusion and bitterness that exists in the relationships of the 25 or more Federal agencies that have an interest in government lands to see how an uncooperative approach to such problems can stifle progress.

In the announcement of this meeting, suggestions were invited for specific "projects" which would bear on the relationship of timber production and recreation. Many worth-while projects will be suggested here and by staff members. In all probability, the principal problem will be to choose which of many projects you can fit into available budgets and personnel. So perhaps one of the most valuable actions the Board can take is to describe or define a program specifically for Jackson Forest by which proposed projects can be evaluated.

It would seem logical that such program statement include at least the following:

"It shall be the purpose of this program to determine -

- "(a) Those recreational uses of the coastal redwood-type forest which interfere least with regrowth after logging.
- "(b) The periods during regrowth when such use is possible,
- "(c) The extent to which payments for recreational use can offset investment, maintenance and tax costs."

The program should also have as one of its goals the training of personnel who, for want of a better term, we might call "extension forester-recreationist," who can work with owners of private timberlands in setting up recreational programs which had already proved their worth at Jackson Forest.

We know that private lands in all likelihood will have to supply the bulk of the game crop, furnish their share of the camp sites and, at the same time, furnish almost 100% of the forest products of the Redwood Region.

It's going to cost money to learn how to do all these things. There are going to be mistakes made and money lost making them. So let's get busy learning as fast as possible and spend our learning costs jointly through our State agencies. And since Jackson Forest is representative of an area that will have a very high pressure on it for all these benefits, let's assign the marginal projects, or the projects that don't fit into the policy statement suggested, to a State forest more suitable to them.

by John Callaghan, Secretary-Manager, California Forest Protective Association

CALIFORNIA'S STATE FORESTS AS OUTDOOR RECREATION LABORATORIES

The several sections of the Public Resources Code pertaining to California's State Forests (Secs. 4421, 4425, 4426, 4436) provide that:

- (1) They are to be used to "promote continuous forest production with due regard to preservation of soil, watershed, scenic, wildlife and recreational values" under rules approved by the State Board of Forestry.
- (2) Reasonable use (in addition to timber production) for "hunting, fishing, recreation and camping" and "use.....for grazing and mining purposes" shall be permitted <u>under rules and regulations approved by the State Board of Forestry.</u>
- (3) Use and development of irrigation and power facilities shall be permitted as provided by law.

This is certainly a description (we may even say a prescription) for multiple use management. It must be accomplished (according to Sec. 4421 P.R.C.) with a view to demonstrating economical forest management. On the Mountain Home State Forest, however, the emphasis in multiple use management is to be on recreational use (Sec. 4436 P.R.C.).

It appears from the foregoing that private timber owners have a real interest in recreational use of State Forests because these areas provide, in effect, a unique field laboratory where it may be possible to explore some of the problems of recreational land use as they affect private timber land. State Forests are unique in that, though they are publicly owned, they have some of the attributes of private land. Not only do they pay taxes (strictly speaking, the law provides for a payment in lieu of ad valorem taxes based on the value of similar lands similarly situated in the county) but they are required to be run so as to demonstrate economical forest management.

Thus, State Forests are subject to some of the same pressures due to recreation as are private commercial timber owners and may be expected to have some of the same constraints. Therefore, it may be possible to try to develop some solutions to the recreational land-use problem that could be applied to private land.

Since assessed values for taxation are determined for State Forests in the same manner as for private land, pressures tending to inflate land values will affect them similarly. These pressures will include recreational developments both on and near the property and may place in question the economic feasibility of continuing timber management on some areas.

State Forests, like private land, are subject to an increasing amount of casual use by hunters, fishermen, campers, etc. This is causing landowners to be faced with the decision as to whether to develop at least rudimentary facilities to take care of the recreationist, whether to institute a permit-charge system

to pay for necessary facilities, whether to lease out certain developments or use-rights on a concession basis, whether to develop a really commercial facility or whether to just lock the whole area up and put out no-trespassing signs.

In the case of State Forests, of course, the choice of excluding recreationists does not exist. As a matter of fact, many private landowners find it difficult or impractical to bring themselves to exclude recreationists from their land. Their viewpoint on this problem varies considerably with the location of their land in relation to public lands, public roads, metropolitan centers and other factors.

There is full agreement among timber landowners that the use of private land by the public for recreation or other purposes is a privilege, not a right, and must be subject to control and management of the owner; that non-paying outdoor recreation is a public responsibility which should be channeled to public lands; that the owner's first responsibility, if he is to stay in business, is to manage his lands profitably in his own best interest. Unfortunately, many members of the public and some of government are reluctant to recognize the right of a private timber owner to exclude the public from his land even though they readily recognize it for other classes of property.

Nevertheless, most timber owners recognize they have a stake in their communities that requires good public relations. Many, therefore, permit limited use of their land by employees and often by local people under permit, especially where there is little readily available public land. In other areas a checker-board of intermingled public and private land with unmarked boundaries or a network of public roads makes it impractical or difficult to prohibit entry by the public generally.

Further, hunting by the public is permitted by many timber owners and it may be desirable at times to do so because of the need to control game population to avoid excessive browsing or other damage to young forests. However, to let it be widely known that a certain specific property is open to hunting or other recreational use is an invitation to be over-run by people and presented with risk and regulation problems the owner is not staffed to handle. For this reason, as such use grows, some owners will doubtless lease out hunting rights to gain at least some protection and recompense for the risks involved.

As casual or permitted use has increased, camp and sanitary facilities have developed or have been developed by owners in certain spots. Policing and maintaining these areas can soon become a burdensome problem and will at some point need to be either discontinued or charged for.

Liability then may become a problem. A person using private land for recreation but not paying a fee to the owner is prohibited from gaining the status of an invitee unless he was expressly invited by the owner or his agent. However, as I understand the legislation (S.B. 639, 1963 Legislature) other existing liabilities of the owner for the user are not changed. Where a fee is charged the user will attain the status of a permittee for whom the owner has certain responsibilities. Thus, the liability problem has not had really substantive change. There is but little record of substantial liability having been sustained by land owners as a result of recreation use, but the threat is there.

The reaction of landowners will continue to be variable. Doubtless many may still wish to accommodate the casual user and where facility maintenance becomes a problem, make a nominal charge for reimbursement.

The question of what degree of use can justify an expenditure, the price to charge to get reimbursement and the type and cost of facility, can be explored on State Forests. Formerly, a landowner could not charge even a nominal fee for a camp facility without being subject to State Housing Act requirements that would force him to install shower houses, flush toilets, running water, etc. New amendments to the Mobile-Home Section of the Act allow the Division of Housing to promulgate regulations which will permit primitive camp facilities where they are not more dense than 5 to any ten acre parcel. Therefore, information on costs, charges and facility design may be useful to owners who do not wish to exclude the public but who have an intensity of use that makes some facility installation necessary.

The problem of handling more intensive recreational use than can be accommodated by the more primitive camping facility might also be studied and reported on, for it is an evolving problem, with each increasing level of use requiring more intensive facility development. The effect of different kinds of facilities and different charges on intensity of use and the relation of cost and income might be explored, for these are problems an owner who has permitted a growing casual use or has made available modest facilities at a nominal charge will in some cases be faced with. I suspect the State Forests must face them too as usage of the initially free facilities grows.

Another problem that merits study is the relation of recreational use to timber production. How much land, if any, is taken out of timber production. What changes in cutting practices, if any, must be initiated. What are the long range effects of intensive recreational use, such as campgrounds, on timber reproduction? 'By rotating recreation use areas, can interference with production be minimized? And will the ecological effect of intensive recreational use degrade the site for recreation or for further timber production?

The U.S. Forest Service in a study of three National Forests concluded that all foreseeable recreational development on them would reduce timber yield about 13% maximum by removing areas from production or requiring modified cutting. This raises the question of relative costs and benefits.

You have already instituted studies on the relation of timber harvesting operations to streamflow and fish production and the result of these studies should be valuable if care is taken that they can be positively related to previously existing fish populations. Additional studies on the relationship of timber harvesting to game population and of the latter to timber regeneration would be of value.

It has been frequently said that timber owners would be well advised to take more advantage of the economic opportunities available through recreational development of their lands. I believe that there are certain opportunities for profitable development, and know that a number of owners are having studies made of these possibilities. However, profit from recreation generally requires considerable capital expenditure and experience shows that it is an extremely risky venture. Generally the investment and profit must be returned by only seasonal operation. It has been said that profitable mountain resorts are generally those in the hands of the third owner--the first two having gone bankrupt.

The State Forests will probably not produce much economic information relative to high-cost recreational development, though some information on the cost and returns of developing and operating the Mendocino-Woodlands might suggest what not to do. However, bearing in mind their purpose of demonstrating economical forest management, information on other recreational uses of value to land managers may be produced.

Though State Forests cannot charge for hunting, they can study the relation of hunting, big game and timber management. Such information will be helpful to forest owners contemplating leasing or otherwise charging for hunting privileges. Leases to hunting clubs are reported to bring 25¢ to 50¢ per acre per year in parts of Mendocino County and may prove helpful in defraying annual carrying costs of timber lands as well as providing a means of regulating hunting use.

As our population grows, the need for land for both timber and recreation will surely grow. A recent report by Resources For The Future, Inc., indicates that wood use could increase about 50% in the next 40 years. Less land will probably be available for timber. Recreation demand will also grow.

These two uses of land will compete and we need to discover the degree of their compatibility both on public and private lands--recognizing that on the latter, taxes must be paid and a profit returned to the owner.

The State Forests, being situated in three widely separated regions (north and south Sierras and redwood region) where use patterns will vary greatly, and having some characteristics of private land, should provide an excellent opportunity to do much of this job.

by H. J. Vaux, Dean, School of Forestry, University of California

The need for additional outdoor recreation facilities (particularly for those in a forest environment) has been thoroughly documented during the past few years. Many specific case histories have demonstrated that the people of California will use all of the additional forest recreation area that will be made available to them, at least for a number of years to come. One of the problems that seems likely to emerge as a result of this "recreation explosion" is that of how to meet appropriate recreational needs without unduly limiting the use of certain forest land for other essential purposes.

In developing an outdoor recreation program for State Forests in California, the starting point must be found in the overall purpose of such Forests as established by law. For Jackson State Forest this purpose is stated as the "demonstration of economical forest management" (Public Resources Code, Sec. 4421). I take it that "forest management" as used in that section envisages management for all types of value potentially available from the Forest, and that "economical management" requires that the values derived should equal or exceed the cost of providing them. Presumably, the "demonstration" is to be directed at both private landowners and the general public.

A second reference point for State Forest recreation policy is provided by the report <u>Outdoor Recreation for America</u> published in 1962 by the National Outdoor Recreation Resources Review Commission. That report emphasizes the importance of State responsibility in fulfilling recreation needs and recognizes that development of private land for recreational use is a key to a successful policy.

In the light of these guides, I would suggest that development of recreational use of Jackson State Forest should be undertaken as an integral part of the demonstration mission of the Forest. Board policy might be directed toward developing on the Forest a recreation program that can serve (a) as a guide and demonstration to private forest owners of the integration of recreational use with other forest uses, especially timber production; and (b) as a demonstration to the public users of the Forest of the biological and economic relationships that underly and permit multiple use management.

(Possibly because of the special historical circumstances surrounding it, the Mendocino Woodlands Tract might need to be excepted from the policies effective on Jackson State Forest generally.)

A policy of the type just suggested might logically emphasize the following considerations.

1. Emphasis should be placed on types of recreational use and types of recreational facilities which show most promise for practical development on private forest lands; e.g., simple, low-cost structures, and exclusion of non-forest types of recreational attractions. Initially many developments would have to be frankly experimental, but the State is in a better position than the private owner to undertake such experiments and it should assume this responsibility.

2. The State should develop its program with the positive objective of achieving sufficient revenue from recreation use to cover both the costs of the recreational facilities and the rental value of the land and timber allotted to exclusive recreational use. Unless such a conscious policy of full cost fees to the users is followed, the demonstration value of the recreation policy will be nominal. Moreover, user fees provide one of the few available measures for limiting recreation demand to what can be provided within a balanced program of economical land use. In view of the general trend in the direction of user fees for recreation, it would be short sighted to initiate a recreation program on State Forests without including such fees, as it will be simpler to introduce them at the beginning, than later on when the program has become established.

In order to realize the potentialities of Jackson Forest as a site for demonstrating forest management, an interpretation program for recreational users and other forest visitors should be developed. Many of you are familiar with the programs of natural history interpretation developed so successfully by the National Park Service. What is needed here is a similar approach to the task of demonstrating multiple use forest management and its biological and economic rationale. Signs, self-conducted walks over carefully prepared exhibition trails, lectures, leaflets designed to help the layman understand what he sees, and many other vailable techniques should be used to give Jackson Forest visitors a grasp of the scientific, economic, and social principles involved in managing forests for multiple purposes.

The costs of such a program should be absorbed by the State. It will require a carefully planned approach and highly qualified personnel to execute it successfully. But the issues at stake are so important that no effort should be spared to develop an effective interpretive program.

Such a program is needed to give the public a more thorough understanding than it now has of forest management problems and practices. Many now have seriously oversimplified ideas, such as the one that any interference with so-called natural processes is some sort of crime against society. Such ideas need to be modified so that the public understands that man is part of the eco-system in which he lives — he can't avoid interference with natural processes — so that the real issue is how man interferes and whether the results on balance are good or bad.

The job of giving this better understanding of the real nature of forest management to the general public becomes increasingly important as recreational use of forest areas grows. The political feasibility of continuing use of forests for commodity production may well depend in the long run on better public understanding of these matters.

Jackson State Forest is a remarkable site at which to do such forest management interpretation work. It reflects the effects of almost a century of use of forest land for timber production. It has many examples of high value recreational sites in young growth timber stands. These provide an unusual opportunity for teaching the lesson that the recreational values of young growth forests though somewhat different than those of old growth may be equally significant in aesthetic terms. The timber management operations on the Forest provide interesting and valuable ecological demonstrations. Interpretation of the ecological conditions associated with harvest cuttings would put public understanding of these

matters on a broader perspective than the present one which seems largely restricted to the aesthetic. Research studies such as the calibrated watersheds, the thinning trials, the planting tests, and the salmon rearing program will provide increasingly interesting and valuable information for the public.

I believe it is important for the Board of Forestry to adopt policies that will capitalize on these opportunities. If such policies are adopted the State Forests will not only help to meet current pressing recreational demands but will also serve to create better understanding of the full meaning to society of forest resources.

The State Forestry Board is engaged in important management and educational activities. The programs being developed will be of far reaching application and have great impact not only upon our important forest resources but upon the way of life of this and future generations. We are not here concerned alone with the utilization of the outdoor recreation resources of the state forests but are equally or perhaps even more engaged in the appropriate utilization and development of outdoor recreation opportunities on the 7-8 million acres of private forest lands. The effect of your demonstration activities on state forest lands will spread far from the point of germination like the concentric waves from a stone thrown in the water.

Full consideration must be given to the total utilization of the diverse benefits of forest holdings — including recreation — insofar as these benefits are compatible with maximum sustained forest product yields. But to do so there must be greater recognition of recreation as a forest product. More than lip service will be needed to provide proper planning and promote appropriate utilization of this but recently recognized forest product.

We recognize, I am sure, that as recreation outlets become scarce and as demand increases the problem of trespass will become more critical. We know that as lands are required for the support of society, there will be fewer acres available for recreation and the difficulties of owners and administrators to control entry over the more limited but valuable wild or forested lands will become more critical.

Conservatively, it has been estimated that in 37 years the population will double; annual vacation time will be four weeks instead of the present average of two. The work week will be 32 hours instead of the present 40. Disposable income will be doubled. These factors will at least treble the use and pressures on our wild lands. We must get ahead of these pressures. We must lead them and not follow - or we will be overwhelmed and swallowed up by them. The private sector recognizes the problem and possibly partially in self defense, but also in genuine altruism and for public relations benefits and for practical enforcement considerations, many of the larger lumber companies permit public use of their areas even where it is not possible to turn the recreation forest resource into profit.

We must join the private sector in this regard. As leaders of government and members of society we have a responsibility to improve the social order in which we live. We must better our environment and conditions which surround us. If we don't lend effort to this end we have lost an opportunity of life and some of the justifications for our existence. Recreation is a way of life. We also have an obligation to exercise some measure of control over the actions of society. Such control will not only reduce fire hazard in the forest, but will improve the health and safety of the users, reduce vandalism and at the same time promote the appreciation of the natural resources we have inherited. However, let us remember these resources

are not truly ours. We are only transients on this earth and have only limited rights to alter those features of creation which by God or man have been granted us.

But the problem is also here, today. It's being worked on. Nationwide there are 20 Federal agencies, nearly 500 state agencies, over 3,000 counties and 765 cities involved in recreation. It should be apparent that with this many organizations working on one problem that there will be considerable gap and overlap in their activities; they could not reasonably be expected to be all moving harmoniously in the same direction, at the same time. Consequently, the Bureau of Outdoor Recreation was established. It is our function to assist in bringing the recreation vectors of the nation together, to bring them into harmony, to act as a clearing house so that professionals may know what is being done in the field. It is our function to see that Federal monies spent for lands and facilities are not wasted. We hope to promote the coordination of planning of Federal agencies, to eliminate duplication of effort and the attendent unnecessary expenditure of recreation dollars. With the passage of the Land and Water Conservation Fund bill we will be able to give financial assistance to the states and local subdivisions, and through this Bill to encourage the coordination of local, state and Federal activities. We will undertake the formulation of a nationwide recreation plan which will put the plans of all agencies into a single document where it can be comprehensively considered.

We offer technical assistance to the States; while it is our function to assist the States we do not intend to superimpose Federal philosophies over State activities. We feel that the State is the focal point in recreation planning and in providing recreation opportunities for the citizens.

To this end we wish to offer the State Board of Forestry all assistance within our purview in your planning activities - so that the forests of California will provide the greatest benefit for the greatest number in the long run.

For many of those present today Mr. DeTurk's presentation is a new approach to an old problem. The other speakers presented some very fine and practical suggestions, recommendations, and ideas. Mr. Allin pointed out that in the year 2000 there will be three people where there is one person today. It seems people are our problem.

As they learn more about the impact of people upon the State today and the demand for recreation, a number of lumber companies are making surveys to determine how recreation can best fit into their economy. Perhaps the rotation idea can be used to good advantage by moving a campground to a new area when the timber crop is to be harvested. The Forest Service has demonstrated in several areas that good campgrounds can be developed in selected areas following careful and judicious logging of the major crop trees.

People coming into the woods do not understand the entire timber growing and harvesting process. They often get very emotional over the cutting of trees. That is why an interpretative program is needed in both private and public forests so people will understand the timber harvesting process and the necessity for forest management. We need the forest products, the payrolls and tax base that go with a managed forest property. We cannot and should not convert all forests to parks and wilderness areas.

It is very timely that the Board is initiating a study of recreation, development, and use in the State Forests. The State, through the Division of Forestry, has the responsibility to demonstrate the compatibility of recreation development with the production of timber.

Mr. Farnsworth identified some areas where discussion and study is needed. If these areas are adequately explored and a reasonable program developed, it will be a service to the entire timber industry as well as the general public.

The public pressure for more recreational opportunities will continue to grow faster than the population growth. While this creates problems, it also brings opportunities. Here should be another source of revenue from forest lands. Probably every major forest property has some land better suited for recreation than any other use. If true, it should be so identified and its use planned for when the need and opportunity arises. This is not only good multiple use but good business management. Many companies have already taken advantage of such opportunities. If this is done, and done well, many of the peoples' pressure problems will be solved or at least modified.

The industrial forest owners have a responsibility to meet new problems with new ideas in these changing times. We, the State, have an obligation to provide leadership and to demonstrate methods and techniques by which recreation use and timber production can be compatible.